

WHAT IS CLAIMED IS:

1. A seal for installation on a trocar having a proximal end that has an access port, which seal is generally cylindrical in shape and has upper portion and lower portion, the lower
5 portion of the seal being formed for mating engagement with the access port at the proximal end of the trocar and the upper portion of the seal having: (a) a central hole formed therein to permit a surgical instrument to pass through the seal; and (b) a plurality of folds formed in the upper portion in proximity to the central hole.

2. The seal of claim 1, wherein the folds comprise a plurality of substantially straight
10 accordion-like folds which radiate outwardly from the central hole.

3. The seal of claim 2, wherein the upper portion of the seal has a recess formed therein and the central hole is at the bottom of the recess.

4. The seal of claim 2, wherein the central hole in the seal is approximately 2.0 millimeters in diameter.

5. The seal of claim 4, wherein the central hole in the seal is expandable from
15 approximately 2.0 millimeters to about thirteen millimeters.

6. The seal of claim 2, wherein it comprises a pliable material.

7. The seal of claim 6, wherein the pliable material is silicone.

8. The seal of claim 2, wherein the accordion-like folds in the seal number between
20 two and seventy-five.

9. The seal of claim 1, wherein the folds comprise a plurality of circular folds, each of which is concentric with the central hole.

10. The seal of claim 9, wherein the upper portion of the seal has a recess formed therein and the central hole is at the bottom of the recess.

11. The seal of claim 9, wherein the central hole in the seal is approximately 2.0
25 millimeters in diameter.

12. The seal of claim 11, wherein the central hole in the seal is expandable from approximately 2.0 millimeters to about thirteen millimeters.

13. The seal of claim 9, wherein it comprises a pliable material.

14. The seal of claim 13, wherein the pliable material is silicone.
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15. The seal of claim 1, wherein the folds comprise a plurality of spiral-like folds which radiate outwardly from the central hole.

16. The seal of claim 15, wherein the upper portion of the seal has a recess formed therein and the central hole is at the bottom of the recess.

5 17. The seal of claim 15, wherein the central hole in the seal is approximately 2.0 millimeters in diameter.

18. The seal of claim 17, wherein the central hole in the seal is expandable from approximately 2.0 millimeters to about thirteen millimeters.

19. The seal of claim 15, wherein it comprises a pliable material.

10 20. The seal of claim 19, wherein the pliable material is silicone.

21. The seal of claim 1, wherein the folds comprise a plurality of petal-shaped folds.

22. The seal of claim 21, wherein the upper portion of the seal has a recess formed therein and the central hole is at the bottom of the recess.

15 23. The seal of claim 21, wherein the central hole in the seal is approximately 2.0 millimeters in diameter.

24. The seal of claim 28, wherein the hole in the seal is expandable from approximately 2.0 millimeters to about thirteen millimeters.

25. The seal of claim 21, wherein it comprises a pliable material.

26. The seal of claim 25, wherein the pliable material is silicone.

20 27. The seal of claim 1, wherein the folds comprise a plurality of indent folds in proximity to the central hole.

28. The seal of claim 27, wherein the upper portion of the seal has a recess formed therein and the central hole is at the bottom of the recess.

25 29. The seal of claim 27, wherein the central hole in the seal is approximately 2.0 millimeters in diameter.

30. The seal of claim 29, wherein the central hole in the seal is expandable from approximately 2.0 millimeters to about thirteen millimeters.

31. The seal of claim 27, wherein it comprises a pliable material.

32. The seal of claim 31, wherein the pliable material is silicone.

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